Amendments to the Specification

Please amend paragraphs [0022] and [0038] as follows:

[0022] Figs. 5A ~~and~~ <u>through</u> 5D are pictorial representations of different scan patterns that may be prescribed using the CT imaging system of Fig. 1;

[0038] Referring particularly to Figs. 2 and 5A, the x-ray controller 22 and the gantry motor controller 23 may be operated according to a prescribed scan to move the scan point 58 in a variety of different patterns. The particular scan pattern chosen will depend on the clinical application. If the x-ray cone beam is moved along the z-axis such that it travels the entire z-axis extent in one revolution of the gantry 12, a simple spiral pattern 76 is produced by the scan point 58. At any given moment during this scan a cone beam of x-rays 78 is produced from a focal point at one of the segments 80 on the anode assembly 42 and this cone beam 78 is detected by the detector array 16. In one preferred embodiment the detector array 16 has 2048 elements in each column along the z-axis and the cone beam intersects a segment 82 of ~~???~~elements as shown in Fig 6. In another preferred embodiment the cone beam 78 intersects all 2048 elements in each column of the detector array 16 as shown in Fig 10. Thus, more than one slice of data is being acquired at all times.